

CLASS NOTES

Class: VIII

Topic:

Ch.1 Rational Number

Ch.3 Understanding Quadrilaterals

Ch.4 Practical Geometry

Subject: MATHS

Q1. Choose the correct option :

1. A rational number can be represented in the form of:

- A. p/q
- B. pq
- C. $p+q$
- D. $p-q$

2. The value of $(\frac{1}{2}) \div (\frac{3}{5})$ is equal to:

- A. $\frac{3}{10}$
- B. $\frac{3}{5}$
- C. $\frac{6}{5}$
- D. $\frac{5}{6}$

3. The associative property is applicable to:

- A. Addition and subtraction
- B. Multiplication and division
- C. Addition and Multiplication
- D. Subtraction and Division

4. The additive identity of rational numbers is:

- A. 0
- B. 1
- C. 2
- D. -1

5. Which of the following rational numbers is in the standard form?

- A. $-\frac{9}{28}$
- B. $-\frac{26}{78}$
- C. $-\frac{14}{16}$
- D. $\frac{48}{-96}$

6. If $\angle A$ and $\angle C$ are two opposite angles of a parallelogram, then:

- A. $\angle A > \angle C$
- B. $\angle A = \angle C$
- C. $\angle A < \angle C$
- D. None of the above

7. ABCD is a rectangle and AC & BD are its diagonals. If AC = 10cm, then BD is:

- A. 10 cm
- B. 5 cm
- C. 15 cm
- D. 20 cm

8.. The quadrilateral whose diagonals are perpendicular bisectors to each other is:

- A. Parallelogram
- B. Rectangle
- C. Kite
- D. Rhombus

9. Which one of the following is a regular quadrilateral?

- A. Square

- B. Trapezium
- C. Kite
- D. Rectangle

10. The sides of a pentagon are produced in order. Which of the following is the sum of its exterior angles?

- A. 540°
- B. 180°
- C. 720°
- D. 360°

Q.2 Fill in the blanks:

(a) Numbers of rational numbers between two rational numbers is ...

(b) The additive inverse of $\frac{-6}{11}$ is _____.

(c) The multiplicative inverse of $-\frac{2}{3}$ is _____.

(d) The reciprocal of $\frac{5}{3}$ is _____.

(e) $\frac{2}{3} \times \frac{4}{5} = \frac{4}{5} \times \frac{2}{3}$ represents the _____ property of multiplications.

(f) $\left(\frac{a}{b} \times \frac{c}{d}\right) \times \frac{e}{f} = \frac{a}{b} \times \left(\frac{c}{d} \times \frac{e}{f}\right)$ represents _____ property of multiplications.

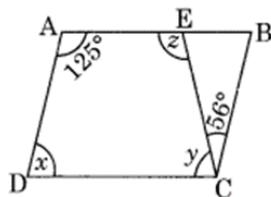
(g) $\frac{2}{3}$ and $\frac{16}{24}$ are two _____ rational numbers.

(h) Absolute value of $\left|\frac{-3}{11}\right|$ is _____.

Q3. ABCD is a parallelogram with $\angle A = 80^\circ$. The internal bisectors of $\angle B$ & $\angle C$ meet at O. Find the measure of the three angles of $\triangle BCO$.

Q4. When the sum of the internal angles of a polygon is 10 right angles, then how many sides does it have?

Q5. In the given figure, ABCD is a parallelogram. Find x, y and z.



Q6, Construct a quadrilateral PQRS, given that QR = 4.5 cm, PS = 5.5 cm, RS = 5 cm and the diagonal PR = 5.5 cm and diagonal SQ = 7 cm

Q7 Construct a quadrilateral ABCD in which BC = 4 cm, $\angle B = 60^\circ$, $\angle C = 135^\circ$, AB = 5 cm and $\angle A = 90^\circ$.

Q8 Construct a rhombus PAIR, given that PA = 6 cm and angle $\angle A = 110^\circ$.

Q9. Construct a rhombus PAIR, given that PA = 6 cm and angle $\angle A = 110^\circ$.

Q10. Calculate the following :

(a) $\frac{-4}{5} \times \frac{3}{7} + \frac{4}{5} \times \frac{3}{7}$ (b) $\frac{1}{2} \times \frac{5}{6} + \frac{1}{3} \times \frac{1}{4}$

Q11. Represent the following rational numbers on number lines.

(a) $-\frac{2}{3}$ (b) $\frac{3}{4}$ (c) $\frac{3}{2}$

Q12. Write any 5 rational numbers between $-\frac{5}{6}$ and $\frac{7}{8}$

Assignment: - Workout all the question in your fair copy. It will give you good practice for your PT-1 exam.